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## ABSTRACT

Peer relationships represent a strong determinant in the development of prosocial behavior. This study compared the relationship of two sociometric methods (a peer nomination and a peer assessment technique) with parent and teacher ratings of social skills and problem behaviors. A peer nomination technique was used to determine the social status of children as reported by 101 students in grades 5 and 6. Teachers and parents of the children were also asked to provide their impressions of the students. In reviewing the results, "Most Liked" and "Social Preference" scores correlated positively with parent and teacher ratings of "Social Skills," and negatively with teacher ratings of "Problem Behaviors." Teacher ratings yielded more consistently significant correlations with results from peer assessment than did parent ratings. It appeared that parent ratings of problem behaviors seemed less related to the peer assessments than did parent ratings of social skills. Researchers also found that academic success is inconsistent with peer ratings of negative behaviors and strongly involved in selection of social favorites. It is hoped that this study will offer encouragement for the further development and use of peer assessment. (RJM)

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## **A Comparison of Two Sociometric Techniques with Parent and Teacher Ratings of Social Skills and Problem Behaviors**

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### **Abstract**

The relationship of parent and teacher ratings of social skills and problem behaviors (using the Social Skills Rating System) with two sociometric measures (a peer assessment and a peer nomination technique) was examined with a sample of regular education fifth- and sixth grade students. Convergent and discriminant validity of like and unlike constructs was explored. The differential magnitudes of parent vs. teacher ratings with sociometric reports was examined.

## **A Comparison of Two Sociometric Techniques with Parent and Teacher Ratings of Social Skills and Problem Behaviors**

Peer relationships represent a strong determinant in the development of prosocial behavior. Positive socialization to the peer group is associated with helpfulness, friendliness, conformity to rules, and positive attitudes toward others, while failure to achieve social status in a peer group places children at risk for subsequent adjustment difficulties in adolescence and adulthood. Clinical assessment of childhood adjustment disorders have relied on ratings of problem behaviors by parents and teachers. In more recent years, these have been supplemented by ratings of positive social skills in an effort to understand and facilitate the socialization process. These research avenues have been resulted in the development of a growing number of commercially-available rating scales and systems.

An assessment domain which has generated considerable research activity but much less commercial development is that of sociometric techniques. These have evolved into at least three categories; peer ratings, peer nominations, and peer assessment. These have been recognized as useful methods for identifying children who experience difficulty with peer relationships (Asher & Hymel, 1981), and are the most direct, low-inference method for assessment (French & Tyne, 1982). Sociometric measures have demonstrated at least moderate test-retest reliability (Moore & Updegraff, 1964), and have been found to be stable over substantial periods of time (Coie, Dodge, & Coppotelli, 1982). Concurrent validity has been indicated by the positive relationship between sociometric ratings of best friends and the frequencies of observed interaction with those friends (Marshall & McCandless, 1957). Teacher ratings of social status correlate significantly with sociometric status (French & Waas, 1985), but little has been

done to investigate the relationship of sociometric techniques with parent and teacher ratings of problem behaviors and social skills.

The purpose of the present study was to investigate the relationship of two sociometric methods (a peer nomination and a peer assessment technique) with parent and teacher ratings of both problem behaviors and social skills, as assessed by the Social Skills Rating System (SSRS: Gresham & Elliott, 1990). The sociometric techniques selected were the Pupil Evaluation Inventory (PEI: Pekarik, Prinz, Liebert, Weintraub, & Neal, 1976) and the Peer Nomination (PN) technique employed by Coie, Dodge, and Coppotelli (1982).

## Method

### Instruments

A peer nomination technique was used to determine social status of children relative to others in their classrooms. Students were provided with an alphabetical roster of students in their classes, and were requested to respond to three questions about their classmates:

- (1) List the names of three kids in your class that you would like to play with, work with, or have as your friends.
- (2) List the names of three kids in your class that you would rather not play with, work with, or have as your friends.
- (3) List the names of three kids in your class that you think would make a good class president or student council member. (This last question was merely a positive distractor, and was not used in analysis.)

Student responses were then tallied to determine the number of acceptances and rejections. Using the technique developed by Coie, Dodge, and Coppotelli (1982) as facilitated by a computer program from Turco & Elliott (year?), students were assigned to one of five social status groups; rejected, neglected, controversial, average, and popular.

The Pupil Evaluation Inventory (PEI) is a peer evaluation technique developed by Pekarik, Prinz, Liebert, Weintraub, and Neale (1976). Each student is given a response matrix with 35 descriptors printed vertically, and the names of their classmates printed horizontally across the top. They are then allowed to indicate as many or as few classmates as they believe are described. The PEI yields scores on three broad factors; aggression (e.g., classroom disruptiveness, physical aggression, attention seeking), withdrawal (e.g., social withdrawal, shyness, oversensitivity), and likeability (e.g., popularity, social competence). The likeability factor contains items that most closely resemble other common sociometric measures, while the aggression and withdrawal factors are similar, respectively, to the broad-band externalizing and internalizing factors often identified by behavior rating scales. As employed in the present study, the PEI was presented in a scannable format developed by Wright and Pillard (1992).

The Social Skills Rating System (SSRS) developed by Gresham and Elliott (1990) serves as a screening and identification measure for children experience interpersonal difficulties. The SSRS includes parent, teacher and student (self rating) forms at three developmental levels, preschool through grade 12. Parent and teacher scales both sample broad domains of social skills and problem behaviors.

### Procedure

A sample of 101 fifth- and sixth-grade students (59 female, 42 male) attending a rural elementary school, who had parental permission for participation, served as subjects. The PEI and PN were administered in three fifth- and three sixth-grade classrooms under standardized instructions. Teachers were given instructions on completion of the SSRS-T. Parents received written instructions on completion of the SSRS-P, which were returned by mail. The PEI yielded scores on three scales; Aggression, Withdrawal, and Likability. The PN yielded four scores; Most Liked and Least Liked totals, and derived scores on Social Impact and Social Preference. The SSRS-T and the SSRS-P each yielded scores on Problem Behaviors and Social Skills; in addition,

the SSRS-T yielded a rating of Academic Competence. Correlations of scores from the two sociometric techniques with results from the SSRS were examined.

### Results

Table 1 presents the correlations of the Aggression, Withdrawal, and Likability scales of the PEI with parent and teacher ratings of Social Skills and Problem Behaviors from the SSRS, as well as teacher ratings of Academic Competence. Table 2 presents correlations of the Most Liked, Least Liked, Social Impact, and Social Preference scales of the Peer Nomination technique with the same scales of the SSRS.

It may first be noted that teacher ratings of both social skills and problem behaviors show a stronger relationship with both methods of peer assessment than do parent ratings on the same constructs. All correlations with teacher ratings are of moderate magnitude and significant beyond the .01 level. By comparison, correlations with parent ratings ranged from negligible to moderate, and only half were significant beyond the .05 level. Second, it may be noted that parent ratings of Social Skills showed stronger and more statistically significant correlations with both types of peer ratings than did parent ratings of Problem Behaviors.

### Discussion

A first point of interpretation should concern the convergent and discriminant validity of peer ratings in concurrent use with parent and teacher ratings. Though none of the PEI scales nor any of the summary scores from the Peer Nomination technique are construed to assess constructs identical to those measured by the SSRS, there are strong, logical relationships. Examining the statistically significant coefficients in Tables 1 and 2, do the directions (positive or negative) of the relationships make sense? The PEI Aggression scale correlates negatively with parent and teacher ratings of Social Skills, and positively with teacher ratings of Problem Behaviors. The PEI Withdrawal scale correlates negatively with teacher ratings of Social Skills and positively with teacher ratings of Problem Behaviors. The PEI Likability scale correlates positively with parent

and teacher ratings of Social Skills and negatively with teacher ratings of Problem Behaviors. These results are logically consistent.

Reviewing relationships with Peer Nomination summary scores, both Most Liked and Social Preference scores correlate positively with parent and teacher ratings of Social Skills, and negatively with teacher ratings of Problem Behaviors. Least Liked scores correlate negatively with parent and teacher ratings of Social Skills and positively with parent and teacher ratings of Problem Behaviors. Social Impact scores display the same direction in these relationships as Least Liked scores, but the correlations are not consistently significant. These results, also, are logically consistent, and offer convincing evidence that the peer, parent, and teacher ratings employed in the present study are tapping common, broad-band constructs of social behavior among school aged children.

A second point of interpretation, which may be noted almost in passing, is that teacher ratings, whether of social skills or problem behaviors, yielded more consistently significant correlations, and of generally greater magnitude, with results from peer assessment than did parent ratings. This is not surprising, since teacher ratings are founded on substantially the same settings and situations as those which influence peer ratings. While not necessarily less accurate, parent ratings reflect substantially different components of variance.

A third point worthy of note is the differential utility of parent ratings in the present study. Parent ratings of Problem Behaviors showed negligible relationships with the PEI scales, but ratings of Social Skills were negatively related with Aggression and positively related with Likability. Parent ratings of Problem Behaviors did correlate positively with Peer Nomination scores on Least Liked and Social Impact, but were lower in magnitude than the correlations of Social Skills ratings with Most Liked and Social Preference scores. Generally speaking, parent ratings of problem behaviors seem less related than parent ratings of social skills to the results of peer assessment.



A fourth point of note is the strong relationship of teacher ratings of Academic Competence with results from the PEI and the Peer Nomination technique. Although academic competence is specifically mentioned in some of the items of the PEI Likability scale, the correlations of the other peer ratings with teacher ratings of competence indicate that academic success is inconsistent with peer ratings of negative behaviors and strongly involved in selection of social favorites.

Finally, the results of the present study offer encouragement for the further development and use of peer assessment. Teacher ratings of social skills and problem behaviors yielded correlation coefficients ranging from .30 to .60, consistently significant beyond the .01 level, with two methods of peer assessment. Much valid and useful information is available from a source traditionally ignored in school assessments; students' peers.

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**Table 1**

**Correlations of Pupil Evaluation Inventory  
with Social Skills Rating System**

<b><u>SSRS Variables</u></b>	<b><u>PEI Variables</u></b>		
	Aggression	Withdrawal	Likability
<b>Parent Ratings</b>			
Social Skills	-.20*	-.15	.40**
Problem Behaviors	.13	.15	-.07
<b>Teacher Ratings</b>			
Social Skills	-.32**	-.33**	.60**
Problem Behaviors	.59**	.31**	-.49**
Academic Competence	-.36**	-.38**	.57**

\* p < .05

\*\* p < .01

**Table 2**  
**Correlations of Peer Nominations**  
**with Social Skills Rating system**

<u>SSRS Variables</u>	MLZ	<u>PN Variables#</u>		
		LLZ	Soc. Impact	Soc. Pref.
Parent Ratings				
Social Skills	.27**	-.29**	-.17	.34**
Problem Behaviors	.02	.20*	.23*	-.12
Teacher Ratings				
Social Skills	.46**	-.52**	-.33**	.58**
Problem Behaviors	-.43**	.52**	.35**	-.56**
Academic Competency	.46**	-.52**	-.31**	.54**
#	Most Liked z score			
	Least Liked z score			
	Social Impact			
	Social Preference			
*	p < .05			
**	p < .01			



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